

FEB 1 3 23

TECH DENIER 1600/2900







PATENT APPLICATION: US/09/525,998A

RAW SEQUENCE LISTING DATE: 02/04/2002

TIME: 11:33:32

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                Output Set: N:\CRF3\02042002\I525998A.raw
 3 <110> APPLICANT: Hauptmann, Rudolph
        Himmler, Adolph
         Maurer-Fogy, Ingrid
         Stratowa, Christian
 R <1208 TITLE OF INVENTION: TNF Receptors, TNF Binding Proteins and DNAs Coding for
         Them
11 <1300 FILE REFERENCE: 98-385-E
13 <1400 CURPENT APPLICATION NUMBER: (9/525,398A
14 <141: CURFENT FILING DATE: 2000-03:15
16 <1500 PFIOR APPLICATION NUMBER: 08/383,676
17 <151: PRIOR FILING DATE: 1995-02-01
                                                                 ENTERED
19 -1150: PRIOR APPLICATION NUMBER: 08/153,287
20 + 151 PRIOR FILING DATE: 1993-11-17
32 -150: PRIOR APPLICATION NUMBER: 07/821,750
13 - 151 PRIOR FILING DATE: 1993-01-02
25 \times 1500 \times \text{PRIOR APPLICATION NUMBER: } 07/511,430
26 - 1910 PRIOR FILING DATE: 1990-04-20
28 - 160 NUMBER OF SEQ ID NOS: 97
30 - 170 - SOFTWARE: PatentIn Ver. 2.0
32 - 210 - SEQ ID NO: 1
33 (211) LENGTH: 1368
34 - 212 - TYPE: DNA
35 - 313 - OFGANISM: Homo sapiens
37 -(220) FEATURE:
38 + 2211 NAME/KEY: CDS
39 +3220 LOCATION: (1)..(1365)
41 - 2200 - FEATURE:
42 - 221 NAME/KEY: sig peptide
43 + 222 + LOCATION: (1)..(87)
45 -12200 FEATURE:
46 HB21 - NAME/KEY: misc_feature
47 (222 · LOCATION: (88)..(120)
48 - 1223 - OTHER INFORMATION: portion of TNF-BP pro protein cleaved by
         extracellular proteases following secretion
4.9
51 - 1220 - FEATURE:
52 ABB1 - NAME/KEY: misc_feature
53 - MAD - LOCATION: (606)..(633)
54 \cdot 1223 \cdot OTHER INFORMATION: portion of TNF-BP pro protein cleaved by
1, 6,
        extracellular proteases following secretion
57 - 3400 \rightarrow \text{SEQUENCE: } 1
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50 Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu

10

48

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DATE: 02/04/2003 TIME: 11:33:32

Input Set : A:\98385Eseq.txt

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5.4				20	_				25					30			
					agg												144
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					caa												192
71 72	Tyr	Ile 50	His	Pro	Gln	Asn	Asn 55	Seri	Ile	Сув	Cys	Thr 60	Буз	CΣ3	His	Lys	
	gga		tac	ttg	tad	aat		tu:	cca	39¢	cag		cag	ga".	acg	gac	240
	_	Thr	Tyr	Leu	Tyr		Asp	Cys	Pro	Gly		GLy	Gln	Asp	Thr		
7 r. 7 is	65 tac	ചനന	аэа	+ , , , +	gag	70 agg	aac	tac	tta	a mm	75 act	tida	ана	aac	cac	80 ata	288
					Glu												
30					85					9.)					95		2
					agc Ser												336
84	tri d	.115	O 1 .3	150	54. 1	J 2	O. I	ny e	105		11,0	21.4		110			
					tgc												384
- 37 - 38	Glu	Il⊕	Ser 115	Ser	Cys	Thr	Vāl	Asp 130	Arg	Asp	Thr	Val	Cys 125	GLY	Cys	Arg	
	aag	aac		tac	cgg	cat	tat		agt	gaa	aac	att		cag	tgc	tto	4.32
	Lys		Gln	Tyr	Arg	His		Trr	Ser	Glu	Asn		Ph⊖	Gl.n	Cys	Phe	
92 93	a a tr	130 tac	י ה ב	ata	tgo	ctc	135 aat	aaa	acc	ata	cac	140 ctc	taa	tac	caa	aaa	4.80
					Cys												
	145					150					155					160	Fos
		-			gtg Val	-											528
100	-	GIII	дэп	1111	165	_	1111	0,5	1115	170		1110	1112	Деч	175		
			-	-			-		-	_		-				e acg	576
$\frac{100}{104}$		ı Glu	a Cys	s Val 180		Cys	: Ser	Asn	. Cys 185		Lys	sei	. Leu	1 GIV 190		s Thr	
106	5 aag			c ota	a ccc											c tca	624
		s Le			ı Pro	Gln	Ile			Val	Lys	Gly	7 Thr 205		ı Asp	Ser	
108		e acc	19! d ada	-	ı eta	tta	r dad	200 edta		att	tto	: ttt			t.go	cott	672
11.	1 G1_{2}	7 Thi	r Th	r Val	Leu	Leu	Pro	Leu	. Val	Ile	Phe	Phe	e Ġĺy	, Lei	ı Cys	s Leu	
112		210				_ 4_ 4_	215		- +			220			. + ~ .	* 224	720
																g aag D Lys	720
11	5 225	5				230)				235	,				240	
																a gag	768
120		ггλ	ы Ге≀	и гуі	r ser 245		: val	Cys	• етХ	туя 250		T.111	. PIC) GIL	д Буз 255	s Glu	
12.	2 ggg	-	-		a gga	act				cac	e ctg				a ada	a agc	815
		y Gli	u Lei			Thr	Thr	Thr			Leu	Ala	Pro			o Ser	
10: 10:		a a o	t aa	260 alat		gar	: ttc	: add	265 acc		: ata	a a a	tto	270 aqt		c gtg	8ñ4
		5				,,,					-						

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/525,998A

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127	Phe	Ser	Pro	Thr	Pro	Gly	Phe	Thr	Pro	Thr	Le∙u	Gly	Phe	Ser	Pro	Val	
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						acc											912
131	Pro	Ser	Ser	Thr	Phe	Thr	Ser	Ser	Ser	Thr	Tyr		Pro	Gly	Asp	Cys	
1.37		190					295					3.0 ()					
					_	ccc	-	-			_						9ř ()
135	Pro	Ası.	Ph⊕	Ala	Ala	Pro	Arg	Arg	Glu	Val	Ala	Pro	Pro	Tyr	Glr	Gly	
$1 + \epsilon$						310					315					320	
130	act	час	300	ato	ctt	geg	aca	gad	ctc	gcc	tac	ga:	900	ate	303	aa€	1908
1 5	Ala	Asr	Pro	Ile	Leu	Ala	Thr	Ala	Leu	Ala	Ser	Asr	Pro	Ile	Pro	Asn	
14%					325					330					3 3 5		
14.	300	ott	cag	बबव्	tgg	gaq	gad	age	gee	cac	aag	cca	cag	age	cta	gac	1056
143	Pro	Leu	Glr	Lys	Trp	Glu	Asp	Ser	Ala	Нiз	Lys	Pro	Gln	Ser	Leu	Asp	
144				340					345					350			
$14 \mathrm{f}$	act	gat	gac	ada	gag	acq	ctg	tac	gaa	gtg	gtg	gag	aac	g t.g	ddd	aag	1104
147	Thr	Asr.	Asr	Pro	Ala	Thr	Leu	Tyr	Ala	Val	Val	$\mathrm{G1} ::$	Asn	Val	Pro	Prc	
145		-	355					360					355				
150	t.t.g	dge	tga	aaq	gaa	ttd	gtg	cgg	aga	cta	ggg	ctq	age	gac	cac	gag	1152
151	Leu	Arq	Trr	Lys	Ğlu	Phe	Val	Arg	Arg	Leu	Gly	Leu	Ser	Asp	His	Glu	
152		$37\hat{0}$	-	•			375	,			_	380					
154	ato	gat	cqq	c*.q	qaq	ctg	cag	aac	ada	oge	tac	otg	aga	gag	geg	caa	1.00
						Leu											
	385	*.	-			390			-		395		_			400	
		age	ata	at.a	aca	acc	taa	agg	cqq	cqc	acq	dad	cqq	cqc	gag	gidio	1 4 8
		-	-			Thr				-							
160					405		-		,	410			-	_	415		
	acq	ota	aaa	eta	cta	gga	cac	ata	ata	टवट	gac	atq	gac	atg	ctq	gge	1296
						Ğly											
164				420		4			425	,	•		•	430		-	
	tac	eta	aaa		atc	gag	gag	aca	ctt	tac	qqc	aaa	qcc	qcc	ata	aag	1344
						Glu											
168	-1-		435					440		1	_		445				
	aaa	aca	ccc	aqt	ctt.	ctc	aga	tga									1368
				-		Leu	-										
172		450				_	455										
	-:210		EO II	ON C	: 2												
				- H: 45													
	<212																
					Home	Homo sapiens											
				NCE:													
						Val	Pro	Asp	Leu	Leu	Leu	Pro	Leu	Val	Leu	Leu	
18.	1	1			5		0			10		~			15		
	_	Len	Leu	V.il	Glv	Ile	Tvr	Pro	Ser		Val	He	Glv	Leu		Pro	
185	211			30	1		-1-		25	1			1	30			
	Hie	Leu	Glv		Δτα	Glu	Twe	Ara		Ser	Val	Cvs	Pro		Glv	Lvs	
188	1113		35	1135	*** 4	oru	-,5	40				-1.	45		1	-,-	
	T'''	Tla		Pro	Gln	Asn	Asn		Tle	Cvs	Cvs	Thr		Cvs	His	Lys	
191	* 2 *	50	1113	110	0111	11011	55	U (, 1		J 3	015	60	_, 5	010		-1-	
	Glar		Tur	ا ا حر ∐	ጥህኮ	Asn		Cvs	Pro	Glv	Pro		Gln	Asp	Thr	Asr.	
100	O - Y	7117	- Y -	±o u	- 1 -			CIS		O - 1	-10	0 + 1	~ J. 11				

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PATENT APPLICATION: US/09/525,998A

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Input Set : A:\98385Eseq.txt

194	65					7 (·					75					80
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1 • 7					8 5					90					95	
$1\cdots$	Arg	His	Cys	Leu	ser	Cys	Ser	Lys	Cys	Arg	Lys	Glu	Met	G1y	Gln	Vàl
200				100					105					110		
202	Glu	Ile		Ser	Cys	Thr	Val		Arg	Asŗ	Thr	Val		Gly	Cys	Arg
2003			1.15					1330					125			
	Lys		Gln	$T \cap T$	Arg	His		Trp	Ser	Glu	Asn		Phe	Gln	Cys	Ph∈
10 A		130	_	_	~		135	~ `		,		140		_	~ >	~ 1
		Сув	ser	Leu	J. S		Asn	GLY	Thr	Val		ьеч	Ser	СЛС	GIN	
	145	71	.	m)	37. 7	150	mla as		77.5 ~	۸ I -	155	71h -	Db.a	Fare	N 22 00	160
	Lγ.ε.	13 1 11	ASE	THI	165	сув	THE	(-) B	HIS	175	GTA	EUF.	РПЕ	Leu	175	بدا بازوا
212	A	.77	7110	W . 1		-2110	cor	A	212		Luc	Zor	Laur	Glu		mhor
215	Atan	'a L 'G	- y 5	180	261	'_ y &	361	Aid.	185	ny s	шув	361	ше-с.	190	~ <u>,</u> 5	Laki
	Ling	T. ⊖ 1.	on the		Dro	Gln	Tle	G 1:		Val	Lus	G1·	Thr	Glu	Asp	Sar
218	ш, с	цеч	195	\	110	5111	110	200	111.11	· · ·	272	311	205	3.1.1	711.12	0.1
	Glv	Thr		Val	Leu	Leu	Pro		Val	Ile	Phe	Phe	Glv	Leu	Cvs	ŭen;
	1	210	•				215		-	-		220	_		•	
	Leu		Leu	Leu	Phe	Ile	Gly	Leu	Met	Tyr	Arg	Tyr	Gln	Arg	qıT	Lys
	21.5					230	-			-	235	•		-	_	240
226	ser	Lys	Leu	Tyr	Ser	Ile	Val	Cys	Gly	Lys	ser	Thr	Pro	Glu	Lys	Glu
21:7					245					250					255	
229	Gly	Glu	Leu	Glu	Gly	Thr	Thr	Thr	$L\gamma s$	Pro	Leu	ϵ lA	Pro	Asn	Pro	ser
230				260					265					270		
	Phe	Ser	Pro	Thr	Pro	Gly	Phe	Thr	Pro	Thr	Leu	Gly	Ph∈	Ser	Pro	Val
233			275					280					285			
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236		290			_		295					300				
		Asn	Phe	Ala	Ala		Arg	Arg	Glu	Val		Pro	Pro	Tyr	GIn	
239	305		D	F1 -	T	310	m1	7.1.	T	3]	315	2	D	T1 ~	D	320
	Ala	Asp	Pro	me	ьеu 325	Ala	THE	ALA	ьеи	330	ser	ASP	Pro	Ile	335	ASII
242	Dro	Tau	Cln	Tarc		Clu	λcn	Sar	7 1 2		Tarc	Dro	Cln	Ser		Nen
245	FIO	₽€ (1	GIII	ду 5 340	пр	3.Lu	нар	261	345	1113	пуъ	FIO	GIII	350	шси	A2F
	Thr	Asp	Asp		Ala	Thr	Leu	ጥッኮ		Val	Val	Glu	Asn	Val	Pro	Pro
248		1105	355				204	360				014	365			
	Leu	Arg	Trp	Lys	Glu	Phe	Val	Arq	Arq	Leu	Gly	Leu	Ser	Asp	His	Glu
251		370	•	•			375	-	_		-	380		•		
	Ile	Asp	Arg	Leu	Glu	Leu	Gln	Asn	Gly	Arg	Cys	Leu	Arg	Glu	Ala	Gln
254	385	-	_			390			_		395					400
256	Tyr	Ser	Met	Leu	Ala	Thr	Trp	Arg	Arg	Arg	Thr	Pro	Arg	Arq	Glu	Ala
257					405					410					415	
359	Thr	Leu	Glu	Leu	Leu	Gly	Arg	Val	Leu	Arg	Asp	Met	Asp	Leu	Leu	${\tt Gl}_Y$
260				420					425					430		
	Cys	Leu		Asp	Ile	Glu	Glu		Leu	Cys	Gly	Pro		Ala	Leu	Pro
363			435					440					445			
	Pro		Pro	Ser	Leu	Leu										
256		450					455									

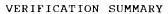
RAW SEQUENCE LISTINGPATENT APPLICATION: US/09/525,998A

DATE: 02/04/2002

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Input Set : A:\98385Eseq.txt

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270 CHID: LENGTH: 483
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272 < 213 ORGANISM: Homo sapiens
274 <220> FEATURE:
275 <221> NAME/KEY: CDS
276 CLUSS LOCATION: (1)..(483)
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780 App Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser
                                          -10
1.83 and tigologic accidant tigologic accidant tigologic accidant _{
m 183} and tigologic _{
m 183}
184 Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys
                 2.0
                                     1:5
187 cou ago cog gag cag gat acg gac tực agg gag tạt gag agc gạc tọc
                                                                         1.44
288 Pro Gly Pro Gly Glr Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser
            35
                                 40
                                                                         192
201 the acc get toa gaa aac cae che aga cae tge etc age tge toe aaa
191 Pho Thr Ala Ser Glu Ash His Leu Arg His Cys Leu Ser Cys Ser Lys
        50
                              55
295 tigo oga alag gala atg ggt dag gtg gag atd tot tot tigo ada gtg gad
                                                                        2.40
296 Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp
297 65
299 egg gae ace gtg tgt gge tge agg aag aac eag tae egg eat tat tgg
                                                                         288
300 Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr Trp
                                          90
303 agt gas aso off the dag tgo the ast tgo ago ofc tgo ofc ast ggg
                                                                         336
304 Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn Gly
305
                100
                                     105
                                                                         384
307 add gtg cad dtd tod tgo dag gag aaa dag aad add gtg tgo add tgd
308 Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn Thr Val Cys Thr Cys
           115
                                 120
311 dat goa ggt the tit dia aga gaa aac gag tgt gtd tod tgt agt aac
                                                                         432
312 His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val Ser Cys Ser Asn
       1.30
                            135
                                                 140
315 tot aag aaa ago otg gag tgo aog aag ttg tgo ota ooc cag att gag
                                                                         480
316 Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu
317 145
                        150
                                                                  160
319 aat
                                                                         483
320 Asn
323 <210> SEQ ID NO: 4
324 <211> LENGTH: 161
325 <212> TYPE: PRT
326 <213> ORGANISM: Homo sapiens
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3.0 Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser
330 1
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332 Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys
333
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Input Set : A:\98385Eseq.txt

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L:1686	M:341	W:	(45)	" n "	zr	"Xaa"	used,	$f \in r$	SEQ	ID#::3	
$\mathtt{L}: \mathtt{BUIP}$	M:341	W:	(46)	" n "	r	"Xaa"	used,	for	SEQ	ID#:18	
L:2239	M:341	W:	(45)	" n "	er	"Xaa"	used,	for	SEQ	ID#:19	
$L: \mathbb{M} \exists \exists 5$	M:341	W:	(45)	" n "	$\circ r$	"Xaa"	used,	for	SEQ	ID#: \2	
L::351	M: 341	W:	(45)	" n "	$\circ r$	"Xaa"	used,	for	SEQ	ID#: 36	
L:3436	M:341	W:	(46)	" n "	$\circ r$	"Xaa"	used,	$f \odot r$	SE⊋	ID#:41	
L:24:7	M: 341	W:	(45)	" n "	$\circ r$	"Xaa"	used,	$f \circ r$	SE⊋	ID#:43	
L:2470	M: 341	W :	(45)	" n "	$\circ r$	"Xaa"	used,	$f \circ r$	SEQ	ID#:43	
L:2489	M:341	W:	(46)	" n "	$\circ r$	"Xaa"	used,	for	SEŢ	ID#:44	
$\mathbf{L}: \mathbb{R}4 \rtimes 2$	M:341	W:	(46)	" n "	$\circ r$	"Xaa"	used,	$f \circ r$	SEQ	ID#:44	
L:2525	M:341	W :	(45)	" n "	or	"Xaa"	used,	$f \odot r$	SEQ	ID#:46	